#### Annual Conference on Fire Related Research and Developments (RE19)\*

Wednesday 13<sup>th</sup> November 2019

West Midlands Fire Service HQ, Birmingham

From 8.30am Registration and coffee

9.15a.m Welcome and Introduction

9.30-10.30am

# Understanding the Physical Health and Wellbeing of Firefighters

Room 1 Chair: Dr Sally Andrews

B Highlands, M Matthews, S Pearson (University of Salford and GMFRS): A feasibility report on the use of an heart rate algorithm estimation method to determine core body temperature in firefighters

J Billings (Embry-Riddle Aeronautical University): 24/48 vs 48/96: The relationship between sleep quality and circadian dysrhythmia

#### **Dynamics of Fire and Fire Behaviour**

Room 2 Chair: Dr Emma Dean

J Gall (West Yorkshire Fire and Rescue Service): Regent Quay - Fire spread to upper floors of a residential flats building through the smoke ventilation shaft system supported by fire modelling

A Nyombi, M Williams, R Wessling (Cranfield University): Toxic carbon monoxide emissions from combustion of coal, charcoal and wood sawdust with a case study of emission build-up in an ISO container

10.30-11.00am

Coffee/poster displays

11.00-12.30pm

Parallel sessions

### **Community Safety and Prevention Activities**

Room 1 Chair: Dr Sally Andrews

J Clarke (Edgehill University): The inclusion of an atrial fibrillation check in FRS Safe and Well visits

G Reinhardt, A MacAlister, K Moir (University of Essex and Essex Fire and Rescue Service): How Safe and Well is your Prevention Activity? A study in impact and effectiveness

K Sambrooks (University of Kent and Kent and Medway NHS and Social Care Partnership Trust): Meta-Analysis of Adult and Juvenile Firesetting Recidivism to Establish the Untreated Base Rate for Reoffending in Deliberate Firesetting

## Fire Engineering and Infrastructure Safety

Room 2
Chair: Dr Peter Wilkinson

J Gall (West Yorkshire Fire and Rescue Service): Fire modelling research of the efficiency of natural smoke shaft systems to protect single staircase residential buildings during firefighting operations

J Baker (University of Edinburgh): Post-Construction Fire Safety: Did we shut the door before the horse had bolted?

B Bulut (Yüksel Proje): Extending Cross-Passage Spacing along Metro Tunnels – a Performance-Based Analysis

#### **Managing Risk in the Community**

Room 1 Chair: Dr Sally Andrews

G Holland (ORH Consultants): Do Response Times Still

Matter?

P Murphy and K Lakoma (Nottingham Trent University): A review of Integrated Risk Management Plans in Fire and Rescue Services

### Fire Professionals' Impact on the Community

Room 2 Chair: Dr Emma Dean

F Long (Hampshire Fire and Rescue Service and Imperial College London): The Impact of Fire and Rescue Service First Responders on Participant Behaviour during Chemical, Biological, Radiological and Nuclear (CBRN)/Hazmat Incidents in the UK

J Foster (University of Cambridge): An Exploratory Study of How Practitioners in UK Fire and Rescue Services Working with Children and Young People who Set Fires Identify Clients Requiring Psycho-Social Interventions

14.30-15.00pm

Tea/poster displays

# Improving Fire and Rescue Services' Operational and Organisational Learning

Room 1 Chair: Dr Peter Wilkinson

D Holdsworth (South Wales Fire and Rescue Service): A Picture Paints a Thousand Words: Complex data interpretation and organisational learning in the UK Fire & Rescue Service

A Brown (Coventry University): Mindsets at Work: Are Firefighters Prepared to Learn from Mistakes?

C Storey, C Brennan and S Waring (University of Liverpool): Do decision logs improve a firefighters' memories?

# Governance and Regulation in the UK Fire and Rescue Service Room 2

Chair: Dr Emma Dean

R Ashworth and C Farrell (Cardiff University): Leadership and Good governance in UK Fire and Rescue Services: Comparing models and reviewing practices

P Murphy, R Glennon, P Eckersley, K Lakoma, K Greenhalgh, A Toothill (Nottingham Trent University and University of Nottingham): Evaluating HMICFRS, the inspection framework and the first round of inspections

P Murphy, R Glennon, P Eckersley, K Lakoma, K Greenhalgh, A Toothill (Nottingham Trent University and University of Nottingham): Improving policy, service delivery and public assurance in Fire and Rescue Services.

16.30pm Final comments, evaluation and depart

#### **Poster Presentations and Displays**

C Spoons (Walden University): Evaluating the Relationship Between the Use of Unapproved Fuels in Live-Fire Training and Carcinogen Exposure.

R Carvel (University of Edinburgh): Backdraught (and how to avoid it).

\*Please Note: These are draft details and may change. Any programme changes will be posted at: www.ife.org.uk/events